N. ENERGY

Appendix F of the *CEQA Guidelines* requires that an EIR include information on the potentially significant energy implications of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. This section describes the existing energy resources available within the Plan area and analyzes the impacts related to these resources that would result from the implementation of *Strategy 2000*. Where appropriate, mitigation measures are recommended.

1. Setting

The following section discusses existing energy sources, as well as the planning and regulatory framework that governs energy use.

a. Energy Resources. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services to the City, including the plan area, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are a number of facilities that produce and transmit power throughout the City. Currently, there are six power plants within City limits and the new Metcalf power plant is being constructed in the southeastern area of San Jose near Metcalf Road and Monterey Highway. The Metcalf Energy Center is expected to be online in 2004[1].

b. Regulatory Framework. California's recent energy crisis prompted the City of San Jose to begin efforts to promote energy conservation, energy efficiency, and alternative energy sources to achieve greater self-sufficiency and system reliability. San Jose's recent efforts are briefly described below.

(1) Smart Energy Plan. In March 2001, the City adopted a Smart Energy Plan, which includes discussions and implementation steps for the following strategies:

- Explore regional energy solutions together with neighboring communities.
- Collaborate with neighboring communities to identify regional criteria for appropriate locations for new large clean plants in Silicon Valley that do not harm residential communities.
- Explore creative energy partnerships among cities, the State, and federal governments, and the private sector to help ensure reliable supplies and achieve conservation.
- Reduce the City's energy demand through vigorous conservation efforts to achieve at least a 10 percent savings and encourage community conservation.
- Expand the City's model program for energy-efficient buildings to encourage long-term permanent conservation.
- Actively encourage small clean power plants in San Jose that can be located in appropriate industrial areas and publicly-owned lands, not in residential neighborhoods.
- Set clear predictable standards for clean energy generation projects within the City's authority and streamline the City's review and approval of appropriate power projects.

[1] Calpine Corporation website: www.metcalfenergycenter.com.

(2) City Energy Programs. The City also has a number of programs to further promote energy conservation among residents and businesses in the City. The Low Income Energy Assistance Program provides financial assistance for energy bill payments to eligible residents, as defined by the California Low Income Home Energy Assistance Program guidelines. In addition, energy efficiency education, audits, and improvements are provided to eligible residents, as defined by the City of San Jose Community Development Block Grant guidelines.

The Cool Communities Program and policies are designed to mitigate the Urban Heat Island effect (in which urban areas can be 6 to 10 degrees warmer than the surrounding countryside due to heat storing properties of urban surfaces), reducing energy use and air pollution resulting from extreme summer temperatures. Cool Communities policies also include tree planting and green roofs to increase both quality of life and property values while reducing urban runoff. San Jose participated in an Urban Heat Island Reduction Initiative of the U.S. Environmental Protection Agency (EPA), which provided City staff with technical and policy expertise. The City is also a participant in the Cities for Climate Protection Campaign, which engages local governments in developing and implementing policies and programs to reduce the greenhouse gas emissions that contribute to global warming.

The City is also an active member of the Bay Area Solar Consortium, which promotes the installation of solar technologies throughout the San Francisco and Monterey Bay areas. The South Bay Clean Cities Coalition, one of 80 coalitions nationwide that comprise the Clean Cities Program of the U.S. Department of Energy, is coordinated by the City's Environmental Services Department and works to advance the use of alternative vehicles and the infrastructure of alternative fuels.

(3) Green Building Policies. The San Jose City Council adopted a series of Green Building Policies on June 19, 2001, to demonstrate the City's commitment to the environmental, economic, and social stewardship and to yield cost savings to city taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources. The Green Building Policy goals include a series in the category of energy and atmosphere. Energy and atmosphere policy goals are as follows:

- *Minimum Energy Performance*: establish the minimum level of energy efficiency for the base building and systems.
- *Optimize Energy Performance*: achieve increasing levels of energy performance above the minimum standard to reduce environmental impacts associated with excessive energy use.
- *Building Commissioning*: verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.
- *Measurement and Verification*: provide for the ongoing accountability and optimization of building energy and water consumption performance over time.
- *Renewable Energy*: encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.
- *Green Power*: encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.
- *Reduce Ozone Depletion*: support early compliance with the Montreal Protocol by eliminating the use of CFC-based refrigerants and reducing the use of HCFCs and halons.

As part of its promotion of Green Building policies, the City encourages participation in City-sponsored organized educational and training events covering green building topics to increase the use of green building techniques in municipal, commercial, and residential building development projects in the City and create greater awareness of these practices.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to energy that could result from implementation of *Strategy 2000*. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts from the project, and mitigation measures if required.

a. Criteria of Significance. Implementation of the proposed Plan would have significant impacts on energy if it would have the following effects:

- Directly affect a major energy line or facility;
- Result in a substantial increase in the demand for energy supplies or transmission services; or
- Use energy in a wasteful manner.

b. Less-Than-Significant Energy Impacts. Future projects developed under *Strategy 2000* would develop the project area with more intensive uses than the existing or historic on-site conditions and would therefore use more energy of several types. The proposed project would consume energy in three forms: 1) the fuel energy consumed by construction vehicles; 2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass; and 3) ongoing energy required for interior lighting, heating/ventilating/air conditioning (HVAC), computers/printers, entertainment components, and security systems. However, all new development is required to incorporate energy conservation measures in compliance with Title 24 and the Uniform Building Code. Compliance with the requirements of Title 24 would adequately mitigate this potential impact to a less-than-significant level.

Future projects developed under *Strategy 2000* would be constructed within or in close proximity to areas that are already served by electric and natural gas lines. It is unlikely that future projects would affect any major energy line or facility, though small distribution lines may need to be upgraded or installed for new developments.

Strategy 2000 promotes high-density residential, commercial, and office development in areas served by public transit and close to employment centers and other existing services. In this way, the growth envisioned by *Strategy 2000* would encourage more efficient energy use than development at the edge of the City or in a development where the land use pattern was more monodimensional and segregated by use.

c. Significant Energy Impacts and Mitigation Measures. Implementation of *Strategy 2000* would not result in significant energy impacts.